

## The Governor's School of New Jersey

# 2012 GOVERNOR'S SCHOOL in the SCIENCES at Drew University July 15 – August 4, 2012

#### PROGRAM OVERVIEW

The New Jersey Governor's School in the Sciences (NJGSS) brings the best science and mathematics students of the state together for a three-week summer residential program held on the campus of Drew University. The program exposes these exceptional scholars to a diversity of courses and experiences that encourages them to explore a career in science and math. This is accomplished by a curriculum of courses, laboratories, team projects, and special lectures. This is enhanced by a college fair which exposes NJGSS scholars to the diversity of college opportunities available and a career day, where alumni join other professionals in sharing their experiences.

There are no examinations or grades, and the program emphasizes group learning and collaboration in the work and study students do for the program. The program seeks to create an atmosphere of collaboration, study, and socializing in the residence hall through a variety of activities supervised by its staff that promotes the concept of a community of interested scholars. Consequently scholars experience a taste of what the college experience will be like.

The program is free of tuition or fees, raising the necessary funds from private and corporate sponsors. It will select scholars for this summer's program based on the excellence of their academic performance, written essays, standardized test scores, math and science teacher recommendations, and extracurricular activities in and out of science.

#### **ELIGIBILITY**

In order to be considered for the Governor's School in the Sciences, a student <u>must</u> meet the following criteria:

- The student must be a New Jersey resident and be a high school junior during the 2011-2012 school year.
- The student must have a very strong interest in science and be committed to the acquisition of knowledge and the pursuit of opportunities in that field.
- The student must be willing to live on campus for the duration of the program. Saturdays and Sundays make up part of the program; there will be no weekend leaves of absence.
- The applicant must be one of the top students in his or her school. The student should have primarily "A" grades in honors math and science classes and outstanding scores on standardized achievement tests. Students who have demonstrated very strong scientific abilities outside the classroom can also be strong candidates for the Governor's School in spite of weaker standardized test scores. Competitive candidates often rank in the top 5% of their class and score above the 90<sup>th</sup> percentile on standardized tests. A student whose standardized test scores are below the 90<sup>th</sup> percentile but rank among the best in his/her school may still apply if he or she is otherwise qualified.

The Governor's School encourages all qualified applicants regardless of sex, race, color, creed, national origin, physical handicap, political activity, or private conduct.

#### PROGRAM DESCRIPTION

The Governor's School in the Sciences has several objectives. The first is to broaden the scholars' appreciation and knowledge of science through exposure to a range of scientific topics and scientists. The subject of career exploration and choice is woven throughout the program. The second objective is to introduce scientific research to the scholars via hands-on research experience in a student's area of interest. Resources from New Jersey's industrial, governmental, and academic science establishments are used.

In previous years, the program at Drew consisted of a number of components designed to accomplish these objectives.

- 1. There is a core curriculum of courses in biology, chemistry, mathematics, physics, and anthropology. Offered four times a week, these courses address aspects of these fields not normally seen in either high school or first year college. Students are required to select three courses from this core. Homework is assigned, although no grades are given for the courses.
- 2. Laboratory courses in Biology, Chemistry, Physics and Computer Science are held two afternoons a week. Each offers innovative experiments. Each student must select one lab course.
- 3. Three afternoons a week are set aside for work on team projects. Students work in small teams under faculty guidance on mini-research topics. Recent topics have included cloning of DNA, enzyme kenetics, raman spectroscopy, invasive plant species in local forests, chemical synthesis, antimicrobials and bacteria, and visual perception. The final day of school is devoted to a scientific meeting at which teams report their results to the entire group. Results are published in an online Governor's School Journal. Work on the research projects frequently takes place during free time on weekends.
- 4. Evening colloquium speakers discuss modern science from both industrial and academic viewpoints. This allows a glimpse into doing science and provides a discussion of real-world considerations related to work in science.

During free evenings and weekends, there is time for study as well as for recreation on the campus and in Madison. Entertainment on campus includes films and the New Jersey Shakespeare Festival. Other special events include a selective college fair and a career morning. Students can attend local religious services.

Closing ceremonies are held at a final banquet for scholars, faculty, counselors, and visiting dignitaries.

The faculty for the Governor's School in the Sciences includes science faculty from Drew and other local colleges, as well as scientists from industrial and governmental laboratories.

Free of exams, grades, or any form of AP or college credit, the experience of scholars spending an intensive time working, learning, and living together has always proven to be productive, satisfying, and memorable for all concerned.

## THE SELECTION PROCESS

To apply for a New Jersey Governor's School program, a student must be nominated by his or her high school's nominating committee. If the high school's junior class contains at most 325 students, only one student may be nominated for each Governor's School program. If the high school's junior class has between 326 and 650 students, two students may be nominated for each Governor's School program. Three students may be nominated only if the junior class comprises more than 650 students.

Students chosen by their high school's nominating committee are termed "nominees." The nominee is responsible for completing all parts of the application, ensuring that all necessary supplements (including transcripts, copies of PSAT scores, and the principal's signature) are in order, and verifying that the application has been submitted by the high school before the deadline. The application must be mailed by the high school, not the applicant, and sent **directly to Drew University** at the following address. **Applications must be postmarked on or before January 13, 2012. DO NOT FAX APPLICATIONS!** 

NJ Governor's School in the Sciences Drew University 36 Madison Ave. Madison, NJ 07940

The Governor's School will confirm receipt of the application by late February in an email to the applicant. Please note that incomplete applications (missing any required document) will not receive full consideration. At Drew University, a panel of professors, researchers, and educators will review nominees' applications. Using the criteria below, this panel chooses the "Governor's Scholars" and invites those students to attend the Governor's School. The committee's decision will be emailed to the student on April 5, 2012. The admissions process is very competitive; in recent years, 15% - 25% of nominees have been offered admission.

#### SELECTION CRITERIA

The selection committee for the Governor's School in the Sciences aims to craft a student body made up of New Jersey's most talented and enthusiastic students. Our student body should be diverse in myriad ways. Our students should possess a great range of gifts in technology, the arts, humanities, and the sciences. Overall, the committee chooses the students who will best take advantage of the opportunities presented by the Governor's School.

Decisions are based on the following qualitative and quantitative criteria:

- The student's high school transcript and class rank, which should demonstrate that the student is at or near the top of his or her class.
- The student's essays and reasons for wanting to attend the Governor's School.
- Letters of recommendation from science and math teachers.
- The student's extracurricular activities and community service pursuits.
- The student's academic and extracurricular honors and accomplishments.
- The student's standardized test scores (PSAT preferred).

We expect Governor's Scholars to exhibit great creativity and a unique passion for the nature of our Governor's School. We look for students who have shown a strong interest in science and mathematics, as well as an open mind and the ability to work on a team to explore these interests further. We want to know what a student hopes to gain from the Governor's School experience, as well as what he or she hopes to contribute to the program. In general, students who have demonstrated a fervent interest in science and mathematics both inside and outside of the classroom will be most successful in the admissions process. A student with perfect standardized test scores but only superficial interest in the nature of the school is not a competitive candidate. Of course, our scholars are not only devoted to science, but also have outstanding test scores and rank at the absolute top of their class. We are privileged to choose the best of the best.

## **CONTACT INFORMATION**

Dr. David Miyamoto, Program Director Myrna Papier, Administrative Manager

Web: http://www.drew.edu/govschool (Sciences only) Email: govschool@drew.edu

**Postal Mail:** Governor's School in the Sciences **Telephone:** 973-408-3605

Drew University 36 Madison Ave. Madison, NJ 07940

http://www.nj.gov/govschool/ (all programs)

## APPLICATION INSTRUCTIONS

**Step 1:** Review the program information and descriptions in this packet.

<u>Step 2:</u> Complete the Cover Sheet page, which is the fifth page of this packet. Complete the online Student Application Information and attach to the Cover Sheet. This Cover Sheet should be the first page of your submitted application.

<u>Step 3:</u> As the second page of your application, include the Check List, which is the sixth page of this packet. Portions of this Check List must be completed by your school principal.

<u>Step 4:</u> After the Check List, attach a list of your extracurricular activities, in order of their importance to you. You are welcome to include clubs at school, community service activities, science, artistic or athletic programs, jobs you've held, individual pursuits, and anything else that you do. Be sure to include leadership roles you hold in any of these activities and the amount of time you spend on these activities. Along with this list, please note any honors (academic or extracurricular) that you have received.

<u>Step 5:</u> After the list of extracurricular activities, include answers to each of the following essay prompts. We recommend about 1 page, single spaced, and a maximum 2500 words for each essay question.

Essay 1) Attach a brief autobiographical sketch which includes your personal background, aspirations, and scientific interests.

Essay 2) Discovery is the hallmark of science. Attach a one-page essay describing one discovery in science or math and the impact it has had on people's lives.

**Step 6:** After the Essays, include 2 recommendation letters, one from a science teacher and one from a mathematics teacher.

<u>Step 7:</u> Verify that your high school will include your official transcript, including junior year grades, and official 2011 PSAT scores. If you did not take the PSAT in 2011, include your 2010 scores. You may include your SAT scores if you have not taken the PSAT. If you have taken neither the PSAT nor the SAT, be sure your principal indicates this on the checklist.

<u>Step 8:</u> If your junior year grades or junior year PSAT scores are not available at the time you submit your application, your school should forward them to the selection committee at Drew University once they become available but no later than mid February.

<u>Step 9:</u> Once your application is complete, it is your responsibility to verify that the application has been mailed by your high school to Drew University by the January 13<sup>th</sup> deadline.

### DATES TO REMEMBER

**January 13, 2012**: Completed applications must be mailed by the high school to Drew University. This is a postmark date.

By late February, 2012: You will receive an email confirming the receipt of your application.

April 5, 2012: You will receive an email announcing the selection committee's decision.

July 15 to August 4, 2012: The Governor's School in the Sciences will be in session on the campus of Drew University.



# The Governor's School of New Jersey

# 2012 GOVERNOR'S SCHOOL IN THE SCIENCES at Drew University

# **Application Cover Sheet**

Student Name (PRINT):	
Student Email (PRINT):	IMPORTANT DATES
School Name (PRINT):	
Please visit the Governor' School in the Sciences web site at:  http://www.drew.edu/govschool/  Follow the link to the 2012 Student Application Information form:  1. Complete and submit this form. 2. Be sure to print the confirmation screen after submitting the form. 3. Attach the printed document to this page.	January 13, 2012 Applications postmarked.  April 5, 2012 Admissions decisions are announced by email.  July 15 – August 4, 2012 The Governor's School in the Sciences is in session.
<b>Note</b> : Applications missing the Online Student Application Information Sheet will not be processed.	
STUDENT AND PARENT CERTIFICATION	
I am a resident of New Jersey.	
I expect to be a high school senior in the 2012-2013 school year.	
I am willing and able to attend the entire Governor's School session.	
Signature of Student Date	
This is to certify that I give my permission for the student named above to participate in the Sciences at Drew University, in full-time residence.	Governor's School in the
Signature of Parent/Guardian Date	

# APPLICATION CHECK LIST (Please include as "Page 2" of your application)

Nominee's Checklist:	
I've included the Cover Sheet ar	nd Confirmation of Student Data submission as Page 1 of my application.
I've included this checklist as Pa	age 2 of my application.
I've attached a list of my extracu	rricular activities and my extracurricular and academic honors.
I've included responses to two e	ssay prompts as per the guidelines on Page 4.
I've attached two letters of recor	nmendation as per the guidelines on Page 4.
My school has included my offic	ial high school transcript and copies of my official PSAT (or other standardized test) scores.
I am a resident of the state of No	ew Jersey and will complete my junior year of high school in June 2012.
	tion for my own records. If my current PSAT scores or transcript were not included, my school will forward ecome available but no later than mid February.
	I have reviewed the checklist above, and have included all necessary and appropriate application materials. All of the information submitted as part of my application is factual and truthful to the best of my knowledge.
	Name of Nominee (please print)
	Student's Signature
Principal's Checklist:	
The nominee is one of our top s	tudents and has expressed a strong interest in the Governor's School in the Sciences.
Governor's School program. If t	orrect number of students. (If the junior class has 1 – 325 students, 1 nominee is permitted for each here are 326 – 650 students, 2 nominees are permitted for each Governor's School program. If there are sees are permitted for each Governor's School program.)
The nominee has included his o responses, and two letters of re	r her application Cover Sheet with Student Data, this checklist, a list of activities and honors, essay commendation.
The transcript includes I will forward his or her February. I have included the student did not tak The student has not tal	igh school transcript and copies of his or her PSAT (or other standardized test) scores. grades from the first marking period of the 2011-2012 school year. junior year grades to the Governor's School once they become available but no later than mid dent's 2011 PSAT scores. (Preferred) e the PSAT in 2011. I have included his/her 2010 PSAT scores. ken the PSAT. I have included the student's SAT scores. are available for this student.
The nominee's standardized test	and eager student, and ranks near the top of his/her class. scores are among the best in our school. The most competitive candidates have test scores above dents with lower scores may apply if they are otherwise a strong candidate.
This student has not been noming	nated to more than one Governor's School.
The nominating high school has	kept a copy of this application on file.
(Governor's School in the Scien	ces only) One letter of recommendation is from a science teacher; the other is from a mathematics teacher.
	I have reviewed the checklist above, and have included all necessary and appropriate application materials. All of the information submitted as part of this application is factual and truthful to the best of my knowledge.

Name of Principal (please print)

Principal's Signature